2005 HARD ROCK MINING IMPACT PLAN

For the

Mines Management, Inc. Montanore Project



Draft Report for Public Review October 7, 2005

Mines Management, Inc.

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Executive Summary

Impact Plan History

In 1990, Noranda Minerals Corp., the original developer of the Montanore project, filed its proposed Hard-Rock Mining Impact Plan with potentially impacted local governmental units in Lincoln County. A 90-day review period was commenced, and the plan became final in March 1991. The plan was completed in compliance with Montana's Hard Rock Mining Impact Act.

Before the study began, communities in both Sanders and Lincoln County, Montana were investigated to see what the potential impacts would be as a result of the Montanore mining project. Both counties were looked at because the ore body was mainly in Sanders County but the mine and mill facilities were to be located in Lincoln County.

After the investigation was complete, it was determined that due to the commuting distance from the mine site to Sanders County, approximately 85 miles, in-migrating mine workers were not expected to establish residency there. Therefore, no net fiscal costs to local government entities in Sanders County were anticipated or addressed in the original Hard Rock Mining Impact Plan.

In 1993, Noranda received all permits necessary to develop the mine, but never did, abandoning the project in 2002. At that point, Mines Management, Inc. became the project operator, and initiated reauthorization for the mine. As a part of this effort, Mines Management submitted a plan to the United States Forest Service and Montana Department of Environmental Quality for their review and comment.

This document updates the original Montanore Hard Rock Impact Plan with current information, anticipated mining production levels, and a new baseline forecast. However, this report continues to assume that Sanders County does not have workers migrating into the county due directly or indirectly to the Montanore Project. Consequently, only the increased fiscal costs to units of local government in Lincoln County are addressed in this updated plan.

Scope of Analysis

The fiscal impact analysis for this Hard Rock Impact Plan is concerned with increased local government costs and revenues as a result of Montanore. Should costs to local governments exceed expected revenues attributable to the Montanore Project, negative monetary impact may occur to the local governmental jurisdictions. The Hard Rock Mining Impact Act allows local governments to negotiate mitigation of financial impacts if a large scale mineral project is determined to have an adverse monetary impact on these entities.



As was done in the 1990 impact plan, fiscal impact costs were calculated by using the case study method of cost-revenue analysis. Impact costs to local governmental units were analyzed in terms of expected additional capital outlays, personnel, and support or operational costs. Impact costs were estimated on a per capita basis using the fiscal year 2003 expenditures for Lincoln County and local governmental units, attributable to all inmigrating workers and their families. Per student costs were added to the costs for children of in-migrating workers. Impact revenues were estimated using the Lincoln County portion of the Metal Mines License Tax, the Lincoln County portion of the Gross Proceeds Tax of Metal Mines, Montanore property taxes for Class 4 and Class 8 properties, as well as property tax revenues for homes purchased by in-migrating direct and indirect workers and commercial tax revenues as a result of increased commercial activity due to the Montanore Project and its direct and indirect workers.

Basic Employment

The employment figures are annual estimates of Montanore's actual employment needs at the time of construction and operations. Construction will commence during year one with the hiring of approximately 135 employees and will last approximately four years. Construction employment will peak at 155 employees during year two. During year three and year four, construction employment will be less than 65 employees. Total operations employment during year one will be only 30 employees, and is expected to peak at 246 employees during year three of the project.

Additional employment will be generated as a result of Montanore's budgeted local purchases. These direct employment figures were calculated using the Census Bureau's 2002 Economic Census value of shipments per dollar of payroll. The value of shipments per dollar of payroll would be \$3.47. The annual wages per worker for these mining support services was an average of \$36,095. Therefore, Montanore's budgeted local purchase of \$6.45 million during year one of the project is expected to generate 52 direct jobs. Montanore's budgeted local purchase would peak at \$27.05 million during year five, which would result in 216 direct jobs.

Total direct employment from construction, operations, and local purchases is expected to peak at 490 employees during year four. Following completion of construction at the end of year five of the project, total employment should level off to 462 workers and remain at this level throughout the life of the mine.

Impact Methodology

The economic impact analysis used herein measures the initial infusion of payroll and local expenditures into the local economy and then computes secondary reactions caused by these funds. This is considered an export base approach. Basic industries are those economic activities that cause money to flow into Lincoln County, in exchange for the export of a good or service. A secondary benefit is realized when this money is re-spent in the Lincoln County economy, generating additional employment and income. This



secondary benefit is called the non-basic impact. These expressions are used interchangeably in this document with the terms *direct* and *indirect*, respectively.

Non-basic or Indirect Employment

In addition to the projected employment created by the construction and operation of Montanore, the Montanore Project can be expected to stimulate increased economic activity and employment in various trade and service sectors of the local study area, the non-basic sectors

Total non-basic employment is expected to generate about 308 jobs in year one, peak at 664 employees during year four, and settle to about 601 jobs in year five and thereafter.

Local Hire Assumptions

A hiring ratio of 80 percent local employment and 20 percent external employment has been used to predict impacts for this study, as it relates to direct project employment. These figures are based, in part, upon Mines Management's experience with hiring practices at other mineral developments; upon local hiring ratios reported for other energy and mineral developments in Montana, Wyoming, and North Dakota (Mountain West Research 1975); and a labor market survey conducted during May/June 2005.

Montanore assumes that 90 percent of non-basic employees would also be hired from the local study area. While no data exist for non-basic local hiring ratios and Montanore has no control over the hiring policies of local governments and businesses, it is assumed that most non-basic employment jobs could be filled by the local available work force, as local unemployment rates indicate sufficient labor force availability.

Family Size

The average family size of in-migrating mine workers depends not only on demographic characteristics of the workers, the percentage of workers married with families, and number of children, but also on the particular phase of the mine development, such as construction or operations. Most environmental impact statement reports that have been prepared for Montana mining projects have assumed homogeneity in the family size of workers with respect to construction and operations phases. However, other studies (Mountain West Research 1975, Leholm, et al. 1975, Wieland et al. 1977) have concluded that family size may vary depending upon the type of employment, direct or indirect, and phase of the project, construction or operations.

For preparation of this impact plan, different family sizes were assumed for the construction and operations phases of Montanore and for the type of employment: basic, non-basic and direct employment. The following narrative describes the assumed family sizes for construction, operations, and direct employment due to local purchases by Montanore.

a. Construction Phase

Several monitoring studies and surveys (Mountain West Research 1975, Leholm et al. 1975, Wieland et al. 1977) indicate that in mineral and energy-related developments, the number of dependents accompanying the worker and, consequently, the overall family size for in-migrating workers is 20 to 30 percent less for construction than for operational workers. The primary reason for this smaller family size of construction workers is due to the assumption that the worker either commutes to the project site or establishes a temporary residence in the study area during the construction phase and the family remains at the place of permanent residence.

Sixty percent of the in-migrating construction employees hired by Montanore are expected to be married with families present and, on the average, have 0.83 children per married family or 0.5 children per worker. The family size of 2.10 for contract construction employees is approximately 35 percent less than that for operations workers employed directly by Montanore; however, it is consistent with estimates derived from monitoring studies for western mineral and energy developments. For example, in a comparison of related worker characteristics for North Dakota Coal Mines, it was found that the family size for in-migrating workers was 2.24 compared to 3.37 for in-migrating operational workers (Leholm et al. 1975).

b. Operations Phase

During the operations phase, the average family size of the in-migrating mine worker is expected to be 3.1 persons. This family size assumes that 80 percent of the in-migrating operations workers would be married with families present and that the average number of children per family would be 1.625 per married family or 1.3 per mine worker. These figures are consistent with data reported by Stillwater County for the Stillwater Mine Complex (John Beaudry, pers. comm., January 1988).

c. Direct Employment (local purchases)

This impact plan assumes that the family size of in-migrating direct employees would be the same as in-migrating operations phase employees, 3.1 persons per family. Also like operations phase employees, 80 percent of the in-migrating direct workers are assumed to be married with families present and 1.625 children per family or 1.3 children per mine worker.

The total number of construction in-migrants would peak during year two at 65 persons. Operations workers with families would peak during year three at 153 persons. Family size of direct employment workers would peak during year five of the project at 134 persons.

This impact plan assumes that family size for in-migrating non-basic employees would be smaller, 2.1 persons per family. Sixty percent of the in-migrating non-basic



workers are assumed to be married with families present and 0.823 children per family or 0.5 children per in-migrating worker.

The total number of non-basic construction in-migrants would peak during year two at 50 persons. Operations workers with families would peak during year three at 80 persons. Family size of direct employment workers would peak during year five of the project at 46 persons.

Settlement Patterns

Impacts to local governmental units within the study area due to in-migrating workers and their families depend entirely upon where the in-migrants choose to reside. One of the most important factors in settlement decisions is commuting distance to the project site. Workers generally wish to reside close to the project site to reduce commuting distance, provided that adequate services such as schools, shopping, and housing are available. Because such services are usually related to the size of the community, in-migrants tend to live in or very near more populated areas where they may obtain these services.

The available housing stock is also a deciding factor in where in-migrants would choose to settle. The impact plan assumes the 2000 Census occupancy rates for housing patterns of the in-migrating workers.

School Participation Rates

The term "children" as used in the context of this report is defined as the number of children between the ages of 0 and 19 living at home. To estimate the number of elementary and high school students accompanying in-migrating mine workers, ratios were developed based on the current and projected Lincoln County school enrollment statistics and on the estimated number of children aged 0 through 19 living in Lincoln County during 2003.

School participation rates were distributed based on the gravity allocation model, and enrollment in the Libby, Troy and Eureka school districts. Further, it was assumed that 70 percent of the children in the rural portions of Lincoln County would be enrolled in the Libby School District, 20 percent in the Troy School District, and 10 percent in the Eureka School District.

In-migrant Costs

Costs to the local government were calculated based on the anticipated expenditure associated with in-migrating workers. Impact costs were estimated on a per capita basis using the fiscal year 2003 expenditures for Lincoln County and local governmental units for in-migrating workers and their families. Per student costs were added to the costs for children of in-migrating workers attending school.



Total basic employment costs due to in-migrating workers are expected to increase from \$253,797 during year one to \$813,366 during year five. Total non-basic employment costs due to in-migrating workers are expected to increase from \$128,987 during year one to \$255,531 during year five.

In-migrant Revenues

Direct impact revenues to units of local government were estimated using four taxes paid by Mines Management, Inc., which are directly attributable to the Montanore Project. These are the Montana Metal Mines License Tax, the Montana Gross Proceeds of Metal Mines Tax (a class 2 property tax), Montana Property taxes for land and improvements (class 4 property), and Montana Property taxes for business equipment (class 8 property). Additionally, impact revenues were computed for property tax revenues for residential properties of both direct and indirect in-migrating homeowner population, and commercial tax revenues as a result of increased commercial activity due to the expected in-migrants.

Property tax revenues were computed for in-migrating workers that would purchase homes in Lincoln County. Property tax revenue calculation assumed an average home price of \$125,662 per in-migrating homeowner. The average home price value is a weighted average of existing single family and mobile home prices in Lincoln County.

Property tax per in-migrating homeowner was calculated by applying the property taxable rate of 3.3 percent, and a mill levy rate of approximately 630 mills. Commercial taxable valuation was calculated at the 2003 commercial/residential ratio of 0.17 percent for each in-migrating worker in Lincoln County. Total basic revenues due to in-migrating workers are expected to increase from \$67,125 during year one to \$154,837 during year five. Total non-basic revenues due to in-migrating workers are expected to increase from \$45,417 during year one to \$88,596 during year five.

Net Impact to Fiscal Operations to Units of Local Government

Total costs to units of local government as a result of the Montanore Project would increase from \$382,784 in year one to approximately \$1.07 million in year five, when the mine and mill operations are at full production. Total property tax revenues would increase from about \$202,500 in year one to nearly \$5.9 million during year five. Net impact would therefore increase from -\$180,242 in year one to over \$4.8 million in year five. While not directly impacted by the Montanore Project, Sanders County receives \$208,000 in gross proceeds tax in year four and \$546,000 in year five. These data are portrayed in Table A, on the following page.



TABLE A NET LOCAL GOVERNMENT FISCAL IMPACT DUE TO MONTANORE **DRAFT FOR INTERNAL REVIEW**

DRAFTFORT	IN I EVINAL V				
Subject	Year 1	Year 2	Year 3	Year 4	Year 5
Costs					
Direct Worker Local Government Costs	253,797	563,239	786,312	798,962	813,366
Indirect Worker Local Government Costs	128,987	236,679	277,825	281,063	255,531
Total Costs to Units of Local Government	382,784	799,918	1,064,137	1,080,025	1,068,897
Revenues					
Montanore Taxes:					
Metal Mines License Tax (to Lincoln County ¹)	0	0	0	215,000	565,000
Gross Proceeds Metal Mines Tax (to Lincoln County ²)	0	0	0	832,000	2,184,000
Gross Proceeds Metal Mines Tax (to Sanders County)	0	0	0	208,000	546,000
Montana Property Tax (C4 – land & improvements)	10,000	740,000	1,290,000	2,060,000	2,060,000
Montana Property Tax (C8 – business equipment)	80,000	150,000	210,000	290,000	290,000
Indirect Worker - Commercial Property Tax Revenues	12,998	23,774	27,787	28,017	25,355
Direct Worker - Commercial Property Tax Revenues	21,549	44,204	57,778	58,445	57,568
Indirect Workers - Residential Property Tax Revenues	32,419	59,296	69,307	69,880	63,241
Direct Workers - Residential Property Tax Revenues	45,576	85,212	102,036	103,163	97,269
Total	202,541	1,102,485	1,756,908	3,864,505	5,888,432
Impact	-180,242	302,567	692,771	2,784,479	4,819,535

According to MCA 15-1-501 the Montana Metal Mines License Tax is allocated as follows:

^{57%} to the state general fund, 2.5% to the hard rock mining impact trust account,

^{8.5%} to the hard rock mining reclamation debt service fund,
7.0% to the reclamation and development grants program state special revenue account, and

^{25.0%} to the county or counties identified as experiencing fiscal and economic impacts.

The allocation of the Montana Gross Proceeds Tax, a Class 2 Property Tax, was settled in the early 1990s. As reported by Mr. Joe LeForest, 80% is to be allocated to Lincoln County and the remaining 20% to Sanders County.



I. Introduction

A. History

In 1990, Noranda Minerals Corp., the original developer of the Montanore project, filed its proposed Hard-Rock Mining Impact Plan with the potentially impacted local governmental units in Lincoln County. A 90-day review period was commenced, and the plan became final in March 1991. The plan was completed in compliance with Montana's Hard Rock Mining Impact Act, explained below.

Before the study began, communities in both Sanders and Lincoln County, Montana were investigated to see what the potential impacts would be of the Montanore mining project. Both counties were looked at because the ore body was in Sanders County and the mine facilities were in Lincoln County.

After the investigation was complete, it was determined that due to the commuting distance from the mine site to Sanders County, approximately 85 miles, in-migrating mine workers were not expected to establish residency there. Therefore, no net fiscal costs to local government entities in Sanders County were anticipated or addressed in the Hard Rock Mining Impact Plan.

In 1993, Noranda received all permits necessary to develop the mine, but never did, abandoning the project in 2002. At that point, Mines Management, Inc. became the project operator, and initiated reauthorization for the mine. As a part of this effort, Mines Management submitted a plan to the United States Forest Service and Montana Department of Environmental Quality for their review and comment.

This 2005 report expands on what was resolved in the 1990 plan: Sanders County is not impacted by the mine, and only fiscal costs for Lincoln County are addressed in the updated plan.

B. Purpose

Montanore will employ 75 or more workers for six months or longer, thus classifying the project as a "large-scale mineral development." New large-scale mineral developments within Montana must fulfill the requirements specified in the Montana Hard-Rock Mining Impact Act.

The intent of the act is to ensure that:

- 1. Local governmental units are able to provide services and facilities that may become necessary as a result of in-migrating workers and their families; and
- 2. Increased costs for providing additional community services and facilities for inmigrating mine workers are the responsibility of the developer and not the local taxpayers.



The mine site is located approximately 18 miles south of Libby. Access to the mine site would be via U.S. Highway 2 and Forest Service Road 278, south of Libby. No direct access to the mine site would be available from Sanders County.

Potentially affected governmental units within the defined study area include:

- 1. Lincoln County Government (including special districts)
- 2. City of Libby
- 3. City of Troy
- 4. City of Eureka
- 5. Libby School District (K-12)
- 6. Troy Elementary School District
- 7. Troy High School District
- 8. Eureka Elementary School District
- 9. Lincoln County High School District

C. Definitions

The following definitions will apply throughout this report:

- 1. Study area: Lincoln County
- 2. <u>In-migrating mine workers</u>: The estimated number of mine workers moving into the study area as a result of employment at Montanore.
- 3. <u>In-migrating mine population</u>: The estimated number of mine workers and their families moving into the study area as a result of Montanore.
- 4. <u>In-migrating mine student</u>: Any school-aged child enrolled in a school in the defined study area that is the ward of an in-migrating mineral development worker.
- 5. <u>In-migrating secondary population</u>: The estimated number of employees and their families moving into the study area as a result of employment in indirect jobs created by the project.
- 6. <u>In-migrating mine-related population</u>: Total population (direct and secondary) moving into the area as a result of the project.
- 7. <u>In-migrating mine-related student</u>: Any school-aged child enrolled in a school in the defined study area who is the ward of the family of an in-migrating mine or secondary (mine-related) employee.
- 8. <u>Local hire</u>: Montanore employees will be considered to be hired locally if they have lived at the same residence or in the same community within the study area for a period of three months.
- 9. <u>Local governmental unit</u>: A political subdivision such as county, city, town, school district, or any other special district that provides services.
- 10. <u>Affected local governmental unit</u>: A local governmental unit within the defined study area that would be impacted as a result of the project.
- 11. <u>Commencement of mining</u>: Date on which the developer initiates the first on-site disturbance related to mine development and construction of the mine or associated milling facilities under the operating permit issued by DSL and USFS.



- The tentative date for the commencement of mining is expected to be in March 2007
- 12. <u>Impact period</u>: Time from 60 days prior to the commencement of construction through the date of the first tax payment on the valuation of the completed project during the operation of the mine.
- 13. <u>Start of production</u>: Date that ore is first removed from the mine and transported to the mill for processing.
- 14. <u>Commercial production</u>: Commercial production would commence from the date that the developer first ships mineral concentrate from its mill for further processing.
- 15. <u>Impact needs</u>: Fiscal needs assessed in terms of expected personnel costs, capital outlays, and support costs necessary to maintain the level of present services offered to the existing and in-migrating population.
- 16. <u>Impact personnel costs</u>: Anticipated expenditures associated with hiring additional employees to satisfy the demands for local government services created by the inmigrating population of Montanore.
- 17. <u>Impact capital costs</u>: As a result of Montanore, the expected need for new buildings, equipment, roads, and any purchases that are not an ongoing expenditure by the governmental unit.
- 18. <u>Impact support costs</u>: Expected non-payroll expenditures such as supplies, materials, utilities, and other operating costs of the governmental unit as a result of the project.
- 19. <u>Impact revenues</u>: Revenues generated by addition of the mine, such as the Metalliferous Mines License tax, the Metal Mines Gross Proceeds tax, other property taxes paid by Mines Management, property taxes paid by new inmigrating residents, expected property taxes paid by new commercial activity, and per capita type revenues (e.g., licenses, fees and permits, and governmental transfers).
- 20. <u>Net impact</u>: Difference between impact needs and impact revenues of the affected local governmental units.
- 21. <u>Project year</u>: Project years for Montanore are expected to conform approximately to calendar years.

D. Potentially Affected Local Governmental Units

The study area for the proposed Montanore Project includes primarily the southwestern portion of Lincoln County. Incorporated municipalities within the study area in Lincoln County are Libby and Troy, as well as the Libby, Troy and Eureka School Districts. The areas are being studied to determine whether a financial impact would occur due to development and operation of the Montanore Project. Access to the mine site would be via U.S. Highway 2 and Forest Service Road 278, approximately 18 miles south of Libby.

The mine location, production and mining/processing methods are described in Section II. Section III discusses the project assumptions, including the timetable for construction, operation and reclamation activities; primary and secondary employment assumptions;



expected migration characteristics; school enrollment characteristics; and property taxes. Section IV describes the current conditions of defined local government units. Specific financial impacts are to be identified by the respective units of local government.

II. Project Description

In 1983, U.S. Borax & Chemical discovered a major silver/copper deposit that would eventually be named Montanore. The corporation initiated baseline studies as part of the operating permit requirements for mining the silver/copper deposit located beneath the Cabinet Mountain Wilderness Area in the Kootenai National Forest, Sanders and Lincoln County, Montana. The Montana Department of State Lands (DSL) and the Kootenai National Forest, primary agencies responsible for permitting mining operations, and U.S. Borax collectively developed a Plan of Study (POS) that defined the nature and extent of the baseline work. Baseline studies were initiated in the spring of 1988.

In September 1988, Noranda Minerals Corporation (Noranda) and Montana Reserves formed a joint venture and purchased the silver/copper deposit from U.S. Borax and named the project the "Montanore Project." Noranda, the designated project manager, continued the mine development activities that had been initiated by U.S. Borax.

Late in 1989, Noranda initiated the development of the Libby Adit to access the Montanore Deposit. After driving the adit 14,000 feet, they terminated the exploration activities. A number of alternative sites were identified for portals, the processing plant, tailings disposal, and ancillary facilities. After reviewing the alternative sites, Noranda developed the proposed mining program described in the Application for a Hard-Rock Mine Operating Permit submitted to DSL in 1992. In 1993, Noranda received all permits necessary to develop the mine.

The original operating permit application described the project as a 20,000 ton per day operation accessed from two (twin) portals in Ramsey Creek; a mill site located adjacent to the Ramsey Creek portals; a portal in Libby Creek; two portals in the Rock Creek drainage for ventilation and emergency access; and a tailings impoundment in the Little Cherry Creek drainage. Access to the Ramsey Creek mine site would be via the existing Bear Creek Road. A new transmission line from Pleasant Valley to the mine site would provide electricity for the proposed mining operation. It was projected that approximately 400 workers would be employed, with most mining positions being filled by the local available work force.

Mines Management, Inc. (Mines Management)'s wholly-owned subsidiary, Newhi, acquired the interests of Heidelberg Silver Mining Company (Heidelberg) through a corporate merger. The assets of Heidelberg consisted of mining claims in the area of the deposit. These claims were part of a lease agreement between Heidelberg and U.S. Borax and Chemical Corporation (U.S. Borax).

Noranda decided to abandon the project in 2002, at which point Mines Management, through its wholly owned subsidiary Newhi, became the operator of the project. Mines Management proceeded to assess the project position and initiated reauthorization for the project. As part of this effort, Mines Management submitted a plan to the United States Forest Service (USFS) and Montana Department of Environmental Quality (DEQ) for their review and comment.



A joint review process between the USFS and DEQ is underway, and an updated Environmental Impact Statement will be completed as part of this review process.

Mines Management plans to implement the same project the agencies reviewed and approved in 1993. This report provides updates that describe hard-rock mining impacts in the defined study area in Lincoln County, Montana.

A. Project Location

The Montanore Project is located in the Cabinet Mountain Wilderness about 18 miles south of Libby, Montana. While the ore body is located beneath the wilderness area, all access and surface facilities are located outside the boundaries of the wilderness area. The permit area is within Sections 13, 14, 15, 23, 24, 26, and 35, T28N, R31W and Sections 1, 2, 3, 11, 14, and 15, T27N, R31W in Lincoln County, and Section 6, T27N, R31W in Sanders County. Surface ownership is on National Forest land with some private land.

B. Mining Plans

Mining plans for the Montanore Project at its inception included production access to the ore deposit from the Ramsey Creek adit as well as construction of multiple ventilation adits. Adits were planned adjacent to Libby Creek and the Ramsey Creek plant site areas for conveying ore and waste, and for ventilation and access of personnel and materials to the mine. Access to the mine was planned at Bear Creek Road. Today, the project plans have primarily stayed the same, except that there will be one portal in the Rock Creek drainage for ventilation and emergency access, and that the base case production is expected to be 12,500 tons per day. The Ramsey Creek mine site would still be accessed via the existing Bear Creek Road. A new transmission line from Pleasant Valley to the mine site would provide electricity for the proposed mining operation. It is projected that approximately 460 workers would be employed, with most mining positions being filled by the local available work force.

Minerals will be processed using conventional flotation process, which generates a silver/copper concentrate. The concentrate will be shipped by train to various smelters for further processing and refining into silver and copper. Base case production of 12,500 tons per day will be reached in the fifth year of operation.

C. Roads, Parking, Utilities and Utility Corridors

Two types of roads are planned for the Montanore project. The road providing access to the site from U.S. Highway 2 via Forest Service Road 278 will have an overall right-of-way of approximately 60 feet and travel width of 20-29 feet. The other road, with a travel surface width of about 24 feet, will be incorporated in the tailings line and power line corridor for the mill to the tailings impoundment site. Small access roads will also be needed to connect various sites to the main road system. Surface parking areas will be provided at all sites to minimize dust.



Telephone communication will be supplied via buried transmission lines along the Bear Creek access road. A power line corridor will be needed to bring electricity in from Pleasant Valley to Ramsey Creek and a tailings line and road corridor will be required to connect the concentrator along Ramsey Creek with the tailings impoundment in the Little Cherry Creek drainage.

D. Production, Mining/Processing Methods

At full base case operation, an estimated 12,500 tons of copper and silver-bearing ore will be mined every day. The underground mining operation will be a mechanized room-and-pillar procedure, which permits the use of large equipment in spacious caverns. The mine is expected to operate 24 hours per day, seven days a week, for 350 days a year. Maintenance repair and security activities will be scheduled during the remaining two weeks of the year.

Ore will be conveyed to a surface stockpile near the portal from where it will be fed to a conventional flotation mill. Concentrate from the mine will be trucked to a rail siding in Libby for shipment to smelting facilities.

Waste rock from the mine is expected to be transported by truck from a temporary stockpile located near the Ramsey Creek adit portal and it is anticipated that nearly all waste rock will be used for construction.

Water encountered during mining will be pumped to settling ponds on the surface. Mine water will be used for mill make-up water or treated and land applied for disposal.



III. Project Assumptions

The fiscal impact analysis for this plan is concerned with increased local government costs and revenues as a result of Montanore. Should costs to local governments exceed expected revenues attributable to the Montanore Project, negative monetary impact may occur to the local governmental jurisdictions. The Montana Hard Rock Impact Act allows local government units to negotiate a financial settlement to mitigate impacts associated with qualifying projects, such as Montanore.

Impact costs to local governments were estimated by using per capita and per student expenses for in-migrating persons. Impact revenues were determined from projections of mineral production, property taxes associated with land, buildings and business equipment associated with the Montanore Project, as well as for residences of the in-migrating population, and for increased commercial activity due to the in-migrants. Other potential sources of revenue include user fees, fines, permits and intergovernmental transfers, which are also estimated on a per capita basis.

A. Project Schedule

The expected timetable for the permitting, construction, operations, and reclamation phases is presented in Table III.1, below. The permitting phase began in 2005, when Montanore officially submitted the operating permit application to DSL and USFS. The EIS process and this impact plan will take place concurrently and should be completed and approved by the end of 2006.

TABLE III.1
EXPECTED SCHEDULE FOR PERMITTING, CONSTRUCTION,
OPERATION AND RECLAMATION PHASES

Phase	Time Period
I – Permitting Phase	2005-2006
II – Construction Phase	2007-2010
III – Operations Phase	2010-2030
IV – Reclamation Phase	2030-2032

At the present time, the tentative date for commencement of construction activities is 2007. Construction activities will include mine access road construction, mine development, surface plant construction, power line construction, plant access road renovation, tailing embankment construction, and installation of service facilities. This is anticipated to occur in March of 2007.

Initial mine production will commence after construction of the surface plant and underground facilities are complete. Approximately three months after the initial stage of operations, full production will begin.

B. Project Employment

1. Basic Employment

The employment figures presented in Table III.2, below, are annual estimates of Montanore's actual employment needs at the time of construction and operations. Construction will commence during year one, with the hiring of approximately 135 employees and will last approximately four years. Construction employment will peak at 155 employees during year 2. During year three and year four, construction employment will be less than 65 employees. Total operations employment during year one will be only 30 employees, and is expected to peak at 246 employees during year three of the project.

TABLE III.2
BASIC EMPLOYMENT

Employment by Type	Year 1	Year 2	Year 3	Year 4	Year 5
Construction Employment	135	155	65	65	0
Operations Employment					
Mine	25	100	188	188	188
Mill & G&A	5	30	58	58	58
Total	30	130	246	246	246
Direct Employment (Local purchases)	52	120	174	179	216
Total Project Basic Employment	217	405	485	490	462

Additional employment will be generated as a result of Montanore's budgeted local purchases. These direct employment figures were calculated using the Census Bureau's 2002 Economic Census value of shipments per dollar of payroll. The value of shipments per dollar of payroll would be \$3.47. The annual wages per worker for these mining support services was an average of \$36,095. Therefore, Montanore's budgeted local purchase of \$6.45 million during year one of the project is expected to generate 52 direct jobs. Montanore's budgeted local purchase would peak at \$27.05 million during year five, which would result in 216 direct jobs.

Total direct employment from construction, operations, and local purchases is expected to peak at 490 employees during year four. Following completion of construction at the end of year four of the project, total employment should level off to 462 workers and remain at this level throughout the life of the mine.

2. Non-basic Employment

In addition to the projected employment created by the construction and operation of Montanore, the Montanore Project can be expected to stimulate increased economic activity and employment in various trade and service sectors of the local study area, the non-basic sectors.

Table III.3 presents the number of full- and part-time non-basic jobs that would be created as a result of expenditures of income from basic jobs. Total non-basic employment is expected to generate about 308 jobs in year one, peak at 664 employees during year four, and settle to about 601 jobs in year five and thereafter.

TABLE III.3 NON-BASIC EMPLOYMENT

Employment by Type	Year 1	Year 2	Year 3	Year 4	Year 5
Due to Construction Employment	209	240	101	101	0
Due to Operations Employment					
Mine	39	155	291	291	291
Mill & G&A	8	46	90	90	90
Total	46	201	381	381	381
Due to Direct Employment (Local					
purchases)	52	122	177	182	220
Total Project Non-basic Employment	308	563	659	664	601

C. Project Impact Period

From the point that operations employment becomes stable, i.e. during year five of operations, no new in-migration to the study area is expected to occur due to Montanore. Therefore, for the purposes of this impact plan, the impact period is assumed to start 60 days prior to commencement of construction and last through the date of the first tax payment on the valuation of the completed project during mine operations.

D. Fiscal Impact Analysis Methodology

Fiscal impacts were calculated for in-migrating workers and their families. The case study method of cost-revenue analysis has been utilized in this impact plan. Impact costs to local governmental units were analyzed in terms of expected additional capital outlays, personnel, and support or operational costs. Impact costs were estimated on a per capita basis using the fiscal year 2003 expenditures for Lincoln County and local governmental units for in-migrating workers and their families. Per student costs were added to the costs for children of in-migrating workers. Impact revenues were estimated using Lincoln County's portion of the Metal Mines Taxes and Gross Proceeds Taxes, other Montanore property taxes, property tax revenues for homes purchased by in-migrating direct and indirect workers, and commercial tax revenues as a result of increased commercial activity due to the Montanore Project and its direct and indirect workers. Table III.4, on the following page, presents details of impact costs and revenues to the Lincoln County government during the construction and operations period of the Montanore mine.

Total costs to units of local government as a result of the Montanore Project would increase from \$382,784 in year one to approximately \$1.07 million in year five, when the mine and mill operation are at full production. Total property tax revenues would increase from about \$202,500 in year one to nearly \$5.9 million during year five. Net impact would therefore increase from -\$180,242 in year one to over \$4.8 million in year five. These data include gross proceeds of the Metal Mines Tax flowing to both Lincoln and Sanders counties, also seen in Table III.4.

³ Metal prices included for the evaluation used a 3-year running average for both silver and copper prices, which is an industry accepted method for establishing metal prices for project evaluations.

TABLE III.4 NET LOCAL GOVERNMENT FISCAL IMPACT DUE TO MONTANORE **DRAFT FOR INTERNAL REVIEW**

DIALLON		_ v : _ v v			
Subject	Year 1	Year 2	Year 3	Year 4	Year 5
Costs					
Direct Worker Local Government Costs	253,797	563,239	786,312	798,962	813,366
Indirect Worker Local Government Costs	128,987	236,679	277,825	281,063	255,531
Total Costs to Units of Local Government	382,784	799,918	1,064,137	1,080,025	1,068,897
Revenues					
Montanore Taxes:					
Metal Mines License Tax (to Lincoln County ⁴)	0	0	0	215,000	565,000
Gross Proceeds Metal Mines Tax (to Lincoln County ⁵)	0	0	0	832,000	2,184,000
Gross Proceeds Metal Mines Tax (to Sanders County)	0	0	0	208,000	546,000
Montana Property Tax (C4 – land & improvements)	10,000	740,000	1,290,000	2,060,000	2,060,000
Montana Property Tax (C8 – business equipment)	80,000	150,000	210,000	290,000	290,000
Indirect Worker - Commercial Property Tax Revenues	12,998	23,774	27,787	28,017	25,355
Direct Worker - Commercial Property Tax Revenues	21,549	44,204	57,778	58,445	57,568
Indirect Workers - Residential Property Tax Revenues	32,419	59,296	69,307	69,880	63,241
Direct Workers - Residential Property Tax Revenues	45,576	85,212	102,036	103,163	97,269
Total	202,541	1,102,485	1,756,908	3,864,505	5,888,432
Impact	-180,242	302,567	692,771	2,784,479	4,819,535

E. Local Hire Assumptions

A hiring ratio of 80 percent local employment and 20 percent external employment has been used to predict impacts for this study. These figures are based, in part, upon Mines Management's experience with hiring practices at other mineral developments; upon local hiring ratios reported for other energy and mineral developments in Montana, Wyoming, and North Dakota (Mountain West Research 1975); and a labor market survey conducted during May/June 2005.

Table III.5, below, presents basic employment figures based on the local hiring ratio. Local and external employment is expected to peak during year four with 392 local employees and 98 external employees.

> TABLE III.5 **BASIC EMPLOYMENT, LOCAL VS EXTERNAL EMPLOYMENT**

Employment by Type	Year 1	Year 2	Year 3	Year 4	Year 5
Loc	ally Hired Em	ployment			
Construction Employment	108	124	52	52	0
Operations Employment					
Mine	20	80	150	150	150
Mill & G&A	4	24	46	46	46
Total	24	104	197	197	197
Direct Employment (Local purchases)	41	96	139	143	173
Total Project Basic Employment	173	324	388	392	370
External Em	ployment (In	-migrant wor	kers)		
Construction Employment	27	31	13	13	0
Operations Employment					
Mine	5	20	38	38	38
Mill & G&A	1	6	12	12	12
Total	6	26	49	49	49
Direct Employment (Local purchases)	10	24	35	36	43
Total Project Basic Employment	43	81	97	98	92

According to MCA 15-1-501 the Montana Metal Mines License Tax is allocated as follows:

^{57%} to the state general fund, 2.5% to the hard rock mining impact trust account,

^{8.5%} to the hard rock mining reclamation debt service fund,

^{7.0%} to the reclamation and development grants program state special revenue account, and

^{25.0%} to the county or counties identified as experiencing fiscal and economic impacts.

The allocation of the Montana Gross Proceeds Tax, a Class 2 Property Tax, was settled in the early 1990s. As reported by Mr. Joe LeForest, 80% is to be allocated to Lincoln County and the remaining 20% to Sanders County.

Montanore assumes that 90 percent of non-basic employees would also be hired from the local study area. While no data exist for non-basic local hiring ratios and Montanore has no control over the hiring policies of local governments and businesses, it is assumed that most non-basic employment jobs could be filled by the local available work force, as local unemployment rates indicate sufficient labor force availability.

Table III.6, below, presents non-basic employment based on the non-basic local hiring ratio. Non-basic employment is expected to peak during year four with 598 employees, while non-basic external employment is expected to peak during year three and year four with 66 employees.

TABLE III.6

NON-BASIC EMPLOYMENT, LOCAL VS EXTERNAL EMPLOYMENT

Employment by Type	Year 1	Year 2	Year 3	Year 4	Year 5
Loc	ally Hired Em	ployment			
Construction Employment	188	216	91	91	0
Operations Employment					
Mine	35	139	262	262	262
Mill & G&A	7	42	81	81	81
Total	42	181	343	343	343
Direct Employment (Local purchases)	47	110	159	164	198
Total Project Non-Basic Employment	277	507	593	598	541
External En	nployment (In	-migrant wor	kers)		
Construction Employment	21	24	10	10	0
Operations Employment					
Mine	4	15	29	29	29
Mill & G&A	1	5	9	9	9
Total	5	20	38	38	38
Direct Employment (Local purchases)	5	12	18	18	22
Total Project Non-Basic Employment	31	56	66	66	60

F. Demographic Characteristics

1. Family Size

The average family size of in-migrating mine workers depends not only on demographic characteristics of the workers, the percentage of workers married with families, and number of children, but also on the particular phase of the mine development, such as construction or operations. Most environmental impact statement reports that have been prepared for Montana mining projects have assumed homogeneity in the family size of workers with respect to construction and operations phases. However, other studies (Mountain West Research 1975, Leholm, et al. 1975, Wieland et al. 1977) have concluded that family size may vary depending upon the type of employment, direct or indirect, and phase of the project, construction or operations.

For preparation of this impact plan, different family sizes were assumed for the construction and operations phases of Montanore and for the type of employment: basic, non-basic and direct employment. The following narrative describes the assumed family sizes for construction, operations, and direct employment due to local purchases by Montanore

a. Construction Phase

Several monitoring studies and surveys (Mountain West Research 1975, Leholm et al. 1975, Wieland et al. 1977) indicate that in mineral and energy-related developments, the number of dependents accompanying the worker and, consequently, the overall family size for in-migrating workers is 20 to 30 percent less for construction than for operational workers. The primary reason for this smaller family size of construction workers is due to the assumption that the worker either commutes to the project site or establishes a temporary residence in the study area during the construction phase and the family remains at the place of permanent residence.

Sixty percent of the in-migrating construction employees hired by Montanore are expected to be married with families present and, on the average, have 0.83 children per married family or 0.5 children per worker. The family size of 2.10 for contract construction employees is approximately 35 percent less than that for operations workers employed directly by Montanore; however, it is consistent with estimates derived from monitoring studies for western mineral and energy developments. For example, in a comparison of related worker characteristics for North Dakota Coal Mines, it was found that the family size for in-migrating workers was 2.24 compared to 3.37 for in-migrating operational workers (Leholm et al. 1975).

b. Operations Phase

During the operations phase, the average family size of in-migrating mine workers is expected to be 3.1 persons. This family size assumes that 80 percent of the inmigrating operations workers would be married with families present and that the average number of children per family would be 1.625 per married family or 1.3 per mine worker. These figures are consistent with data reported by Stillwater County for the Stillwater Mine Complex (John Beaudry, pers. comm., January 1988).

c. Direct Employment (local purchases)

This impact plan assumes that the family size of in-migrating direct employees would be the same as in-migrating operations phase employees, 3.1 persons per family. Eighty percent of the in-migrating direct workers are assumed to be married with families present, with 1.625 children per family or 1.3 children per mine worker.

Table III.7, on the following page, presents the number of total in-migrants to Lincoln County, the number of workers along with families based on family size assumptions of in-migrating workers. The total number of construction in-migrants would peak during year two at 65 persons. Operations workers with families would peak during year 3 at 153 persons. Family size of direct employment workers would peak during year five of the project at 134 persons.

TABLE III.7

BASIC EMPLOYMENT, FAMILY TYPE AND SIZE OF IN-MIGRANT WORKERS

JIZL C	I IIN-IVIIGI	ZMIAI AA	JINKLING						
In-migrants by Family									
Туре	Year 1	Year 2	Year 3	Year 4	Year 5				
Construction									
Workers	27	31	13	13	0				
Spouses	16	19	8	8	0				
Children	14	16	7	7	0				
Elementary (incl. Middle)	5	6	3	3	0				
High School	3	4	2	2	0				
Not in School	5	5	2	2	0				
Total In-migrants	57	65	27	27	0				
Persons Per Household	2.1	2.1	2.1	2.1	-				
	Oper	ations							
Workers	6	26	49	49	49				
Spouses	5	21	39	39	39				
Children	8	34	64	64	64				
Elementary (incl. Middle)	3	13	26	27	28				
High School	2	8	16	16	15				
Not in School	3	12	22	22	21				
Total In-migrants	19	81	153	153	153				
Persons Per Household	3.1	3.1	3.1	3.1	3.1				
Direct Em	ployment (Le	ocal Purch	ase worker	s)					
Workers	10	24	35	36	43				
Spouses	8	19	28	29	35				
Children	13	31	45	47	56				
Elementary (incl. Middle)	5	12	18	19	24				
High School	3	8	11	11	13				
Not in School	5	11	16	16	19				
Total In-migrants	32	74	108	111	134				
Persons Per Household	3.1	3.1	3.1	3.1	3.1				

This impact plan assumes that family size for in-migrating non-basic employees would be smaller, 2.1 persons per family. Sixty percent of the in-migrating non-basic workers are assumed to be married with families present, with 0.823 children per family or 0.5 children per in-migrating worker.

Table III.8, on the following page, presents the number of total non-basic in-migrants to Lincoln County, the number of workers along with families based on family size assumptions of non-basic in-migrating workers. The total number of non-basic construction in-migrants would peak during year two at 50 persons. Operations workers with families would peak during year three at 80 persons. Family size of direct employment workers would peak during year five of the project at 46 persons.

TABLE III.8
NON-BASIC EMPLOYMENT, FAMILY TYPE AND SIZE OF IN-MIGRANT WORKERS

In-migrants by Family Type	Year 1	Year 2	Year 3	Year 4	Year 5
	Co	onstruction			
Workers	21	24	10	10	0
Spouses	13	14	6	6	0
Children	10	12	5	5	0
Elementary (incl. middle)	4	5	2	2	0
High School	3	3	1	1	0
Not in School	4	4	2	2	0
Total In-migrants	44	50	21	21	0
Persons Per Household	2.1	2.1	2.1	2.1	
	C	perations			
Workers	5	20	38	38	38
Spouses	3	12	23	23	23
Children	2	10	19	19	19
Elementary (incl. middle)	1	4	8	8	8
High School	1	3	5	5	4
Not in School	1	4	7	7	6
Total In-migrants	10	42	80	80	80
Persons Per Household	2.1	2.1	2.1	2.1	2.1
Dire	ect Employmen	t (Local Purcha	se workers)		
Workers	5	12	18	18	22
Spouses	3	7	11	11	13
Children	3	6	9	9	11
Elementary (incl. middle)	1	2	4	4	5
High School	1	2	2	2	3
Not in School	1	2	3	3	4
Total In-migrants	11	26	37	38	46
Persons Per Household	2.1	2.1	2.1	2.1	2.1

F. School Participation Rates

The term "children" as used in the context of this report is defined as the number of children between the ages of 0 and 19 living at home. To estimate the number of elementary and high school students accompanying in-migrating mine workers, ratios were developed based on the current and projected Lincoln County school enrollment statistics and on the estimated number of children aged 0 through 19 living in Lincoln County during 2003. Table III.9, below, presents the school enrollment ratios for Lincoln County.

TABLE III.9
SCHOOL ENROLLMENT PATTERNS

2006-2010							
School Enrollment	2006	2007	2008	2009	2010		
Elementary (incl. middle)	39.17	39.88	40.61	41.60	43.45		
High School	25.37	25.07	24.86	24.28	22.99		
Not in School	35.45	35.06	34.53	34.12	33.55		
Total	100.00	100.00	100.00	100.00	100.00		

School participation rates were distributed based on the gravity allocation model, and enrollment in the Libby, Troy and Eureka school districts. Further, it was assumed that 70 percent of the children in the rural portions of Lincoln County would be enrolled in the Libby School District, 20 percent in the Troy School District, and 10 percent in the Eureka School District.

Table III.10, below, presents school enrollment for children of basic in-migrating workers. The Libby school district is expected to have the largest enrollment of children of in-migrant workers. Of the basic in-migrating workers' children between the ages of 0 and 19, 53 are expected to be enrolled in grade school, 27 in high school, and 40 not attending school.

TABLE III.10
SCHOOL ENROLLMENT PATTERNS BY SCHOOL DISTRICT
CHILDREN OF BASIC IN-MIGRANT WORKERS

School Enrollment	Year 1	Year 2	Year 3	Year 4	Year 5
	Lib	by			
Elementary (incl. middle)	11	25	36	38	41
High School	7	16	22	22	21
Not in School	10	22	31	31	31
Total	27	62	90	91	93
	Tro	ру			
Elementary (incl. middle)	2	5	7	7	8
High School	1	3	4	4	4
Not in School	2	4	6	6	6
Total	5	12	17	18	18
	Euro	eka			
Elementary (incl. middle)	1	2	3	4	4
High School	1	1	2	2	2
Not in School	1	2	3	3	3
Total	3	6	8	9	9

Table III.11, below, presents school enrollment for children of non-basic in-migrating workers. Of the non-basic in-migrating workers' children between the ages of 0 and 19, 13 are expected to be enrolled in grade school, 7 in high school, and 11 not attending school.

TABLE III.11
SCHOOL ENROLLMENT PATTERNS BY SCHOOL DISTRICT
CHILDREN OF NON-BASIC IN-MIGRANT WORKERS

School Enrollment	Year 1	Year 2	Year 3	Year 4	Year 5
	Lib	by			
Elementary (incl. middle)	5	9	10	11	10
High School	3	5	6	6	5
Not in School	4	8	9	9	8
Total	12	22	26	26	23
	Tro	ру			
Elementary (incl. middle)	1	2	2	2	2
High School	1	1	1	1	1
Not in School	1	1	2	2	2
Total	2	4	5	5	5
	Eur	eka			
Elementary (incl. middle)	0	1	1	1	1
High School	0	1	1	1	1
Not in School	0	1	1	1	1
Total	1	2	2	2	2

G. Expected Migration and Settlement Patterns

1. Settlement Patterns

Impacts to local governmental units within the study area due to in-migrating workers and their families depend entirely upon where the in-migrants choose to reside. One of the most important factors in settlement decisions is commuting distance to the project

site. Workers generally wish to reside close to the project site to reduce commuting distance, provided that adequate services such as schools, shopping, and housing are available. Because such services are usually related to the size of the community, inmigrants tend to live in more populated areas where they may obtain these services.

Table III.12, below, illustrates distances from various communities in the study area to the mine site, the community population, and an expected settlement distribution of inmigrating workers based on a classic gravity allocation model (Murdock et al. 1978). The gravity model is expressed in terms of the probability that workers will gravitate toward the mine site based on population density and distance from the center. The model was specified as:

Probability = <u>Population/Distance² for given Towns/Cities</u> Sum of Population/Distance² for all Towns/Cities

TABLE III.12
GRAVITY ALLOCATION MODEL

Area	2000 Population	Distance (D)	D^2	Pop/D ²	Probability
Libby	2,626	18	324	8.10	32.81
Troy	957	42	1,739	0.55	2.23
Eureka	1,017	67	4,436	0.23	0.93
Rural Lincoln County Average	14,237	30	900	15.82	64.04
Lincoln County	18,837	156	7,398	24.70	100.00

2. Migration Estimates

An estimate of net migration to the study area was developed based on the aforementioned employment levels, local hiring assumptions, demographic characteristics, and settlement patterns. About 33 percent of the in-migrating workers are expected to move to Libby, about 2.2 percent to Troy, close to 1 percent to Eureka, and the largest group of in-migrating workers, about 64 percent, are expected to be moving to rural areas of Lincoln County.

Table III.13, on the following page, presents the expected settlement patterns of basic inmigrating workers. Montanore expects in-migration to begin during the first year of the project, with an estimated 107 basic workers migrating into the study area. Beginning with the third year in-migration is expected to increase, with a peak migration of total net migrants of 291 persons. With the completion of the construction phase, in-migration is expected to decline during year five to a total of 287 basic net migrating workers.

TABLE III.13
BASIC NET MIGRANTS, EXPECTED SETTLEMENT BASED ON A
GRAVITY ALLOCATION MODEL

Area	Year 1	Year 2	Year 3	Year 4	Year 5
Alea	Construction		i eai 5	i cai 4	i ear 5
Libby	19	21	9	9	0
Troy	1	1	1	1	0
Eureka	1	1			0
Rural Lincoln County	36	42	17	17	0
Total	57	65	27	27	0
	Operations I				
Libby	. 6	26	50	50	50
Troy	0	2	3	3	3
Eureka	0	1	1	1	1
Rural Lincoln County	12	52	98	98	98
Total	19	81	153	153	153
Dire	ct Employment (Loc	al Purchase	workers)		
Libby	10	24	35	36	44
Troy	1	2	2	2	3
Eureka	0	1	1	1	1
Rural Lincoln County	20	48	69	71	86
Total	32	74	108	111	134
	Total Basic Ne	t migration			
Libby	35	72	94	95	94
Troy	2	5	6	6	6
Eureka	1	2	3	3	3
Rural Lincoln County	69	141	184	186	183
Total	107	220	288	291	287

Table III.14, displayed below, presents the expected settlement patterns of non-basic inmigrating workers. Non-basic employment due to Montanore is expected to peak during year four, with the generation of an addition of 139 non-basic jobs.

TABLE III.14

NON-BASIC NET MIGRANTS, EXPECTED SETTLEMENT BASED ON A

GRAVITY ALLOCATION MODEL

Area	Year 1	Year 2	Year 3	Year 4	Year 5				
Construction Migration									
Libby	14	17	7	7	0				
Troy	1	1	0	0	0				
Eureka	0	0	0	0	0				
Rural Lincoln County	28	32	14	14	0				
Total	44	50	21	21	0				
	Operations	Migration							
Libby	3	14	26	26	26				
Troy	0	1	2	2	2				
Eureka	0	0	1	1	1				
Rural Lincoln County	6	27	51	51	51				
Total	10	42	80	80	80				
Direc	t Employment (Loc	al Purchase v	workers)						
Libby	4	8	12	13	15				
Troy	0	1	1	1	1				
Eureka	0	0	0	0	0				
Rural Lincoln County	7	16	24	24	30				
Total	11	26	37	38	46				
	Total Non-Basic	Net migration	า						
Libby	21	39	45	46	41				
Troy	1	3	3	3	3				
Eureka	1	1	1	1	1				
Rural Lincoln County	41	76	89	89	81				
Total	65	118	138	139	126				

The available housing stock is also a deciding factor in where in-migrants would choose to settle. Table III.15, below, lists the number of existing housing units by area as per the 2000 Census. The homeownership rate in Lincoln County was at 76.5 percent, and the vacancy rate was at 20 percent during 2000.

TABLE III.15
HOUSING UNITS BY TENURE
2000 CENSUS

	2000 0211000								
Area	Housing Units	Owner Occupied	•						
Libby	1,264	650	482	132					
Troy	469	281	144	44					
Eureka	494	284	147	63					
Rest of Lincoln	7,092	4,726	1,050	1,316					
Total Lincoln County	9,319	5,941	1,823	1,555					

The impact plan assumes the 2000 Census occupancy rates for housing patterns of the inmigrating workers. Table III.16, below, presents the settlement patterns of the basic inmigrating workers based on the gravity allocation model by occupancy status. Of the basic in-migrating workers homeownership is expected to peak during year three and year four, with 71 and 72 homeowners. There would be an additional 26 workers during year three and year four seeking rental housing.

TABLE III.16
BASIC IN-MIGRANT WORKERS BY SETTLEMENT AREA BY TENURE

Area	Year 1	Year 2	Year 3	Year 4	Year 5				
Owners									
Libby	8	15	18	18	17				
Troy	1	1	1	1	1				
Eureka	0	0	1	1	1				
Rural Lincoln County	23	42	51	51	48				
Total Owners	32	59	71	72	68				
		Renters							
Libby	6	11	14	14	13				
Troy	0	1	1	1	1				
Eureka	0	0	0	0	0				
Rural Lincoln County	5	9	11	11	11				
Total Renters	12	22	26	26	25				
		Total							
Libby	14	27	32	32	30				
Troy	1	2	2	2	2				
Eureka	0	1	1	1	1				
Rural Lincoln County	28	52	62	63	59				
Total	43	81	97	98	92				

Table III.17, on the following page, presents the settlement patterns of the non-basic inmigrating workers based on the gravity allocation model by occupancy status. The nonbasic jobs created due to Montanore is expected to add 48 and 49 new homeowners during year three and year four of the project.

TABLE III.17

NON-BASIC IN-MIGRANT WORKERS BY SETTLEMENT AREA BY TENURE

	20	UU CENSUS			
Area	Year 1	Year 2	Year 3	Year 4	Year 5
		Owners			
Libby	6	11	12	13	11
Troy	0	1	1	1	1
Eureka	0	0	0	0	0
Rural Lincoln County	16	30	35	35	31
Total Owners	23	41	48	49	44
		Renters			
Libby	4	8	9	9	8
Troy	0	0	0	1	0
Eureka	0	0	0	0	0
Rural Lincoln County	4	7	8	8	7
Total Renters	8	15	18	18	16
		Total			
Libby	10	18	22	22	20
Troy	1	1	1	1	1
Eureka	0	1	1	1	1
Rural Lincoln County	20	36	42	43	38
Total	31	56	66	66	60

H. Montanore Taxes

1. Metal Mines License Tax

This covers mining operations in which metal or gems are extracted. These are subject to a license tax, which is based on the gross value of the product. The value to which the tax rate is applied is the monetary payment the mining company receives for the metal trader, smelter, roaster or refinery. This is determined by multiplying the quantity of metal received by the quoted prices for the metal, then subtracting basic treatment and refinery charges, quantity deductions, price deductions, interest and penalties, metal impurity, and moisture deductions as specified by contract between the mining company and the receiving metal trader, smelter, roaster or refinery. Deductions are also allowed for the cost of transportation from the mine or mill to the smelter, roaster or refinery.

Concentrate shipped to a smelter, mill or reduction work is taxed at 1.81 percent of gross value more than \$250,000. Gold, silver or any platinum-group metal that is dore, bullion matte or other form of processed concentrate that is processed in a treatment facility owned or operated by the taxpayer and that is sold or shipped to a refinery for final processing is taxed at 1.6 percent of gross value over \$250,000.

a. Disposition of Metal Mines License Tax

Metal mines licensing taxes collected must be collected in accordance with the provisions of Montana Code Annotated (MCA) 15-1-501, and be allotted as follows:

- To the credit of the general fund of the state, which is 57 percent of total collections each year;
- To the state special revenue fund to the credit of a hard rock mining impact trust account, 2.5 percent total collections each year;
- To the hard rock mining reclamation debt service fund, 8.5 percent per year;

- To the reclamation and development grants program state special revenue account, 7 percent of total collections each year;
- Within 60 days of the date the tax is payable, pursuant to MCA 15-37-105, to the county or counties identified as experiencing fiscal and economic impacts, which result in increased employment or local government costs, under an impact plan for large scale minerals developed, prepared, and approved pursuant to MCA 90-6-307.

If an impact plan has not been prepared pursuant to the above code, then 25 percent of total collections each year will be allocated by the county commissioners as follows:

- No less than 37.5 percent may be allocated to the hard-rock mine trust account established in MCA 7-6-2225. All money not allocated to the account will be further allocated as follows: There will be 33.3 percent for elementary school districts within the county, 33.3 percent allocated to high school districts within the county, and 33.3 percent will be allocated to the county for general planning functions, such as economic development activities as described in MCA 7-6-225 (3) (c) to (3) (e).
- When an impact plan for a large-scale mineral development approved pursuant to MCA 90-6-307 identifies a revenue disparity, the county shall distribute the proceeds allocated under subsection (1) (e) in a manner similar to that provided for property tax sharing under Title 90, chapter six, part four.
- The department shall return to the county where metals are produced, the tax collections allocated under subsection (1) (e). The allotment to the county described by subsection (1) (e) is a statutory appropriation pursuant to 17-7-502.

Hence, taxes reported in this document associated with the Metal Mines License tax are those allocated to Lincoln County, or 25 percent of the total Metal Mines License Tax liability.

2. Gross Proceeds of Metal Mines Tax

This is a yearly tax imposed on the gross proceeds of metal mines, in accordance with MCA 15-23-801. It is considered a Class 2 property tax. Gross proceeds mean the monetary payment or refined metal received by the mining company from the metal trader, smelter, roaster or refinery. It is determined by multiplying the quantity of metal received by the by the quoted price for it, and then subtracting basic treatment and refinery charges, quantity deductions, price deductions, interest and penalties, and metal impurity and moisture deductions as specified by contract. The taxable value of metal mines is equal to 3 percent of annual gross proceeds. This amount is subjected to local mill levies in the jurisdiction in which the taxable value of the mining operation is allocated. For the purposes of this document, Mines Management has estimated the local mill levies to represent 500 mills, or 1.5 percent of the annual gross proceeds

The tax is collected by local county treasurer. The taxable valuation of hard rock mining operations is subjected to allocations specified by hard-rock mining impact property tax base sharing laws. Mines that produce less than 20,000 tons of ore in a year, as



Montanore is not expected to do, are exempt from property taxes on half of the merchantable value, pursuant to MCA 15-6-208.

As was determined during the early 1990s, this tax is to be allocated between Lincoln and Sanders counties, with Lincoln County receiving 80 percent and Sanders County receiving 20 percent of such tax payments.⁶

3. Other Property Taxes

Mines Management, Inc. prepared estimates of two additional property taxes to be paid due to the mining and milling operations. These are represented by the land and improvements, Class 4 property, and all business equipment, or Class 8 property. Taxable value of Class 4 properties was determined by taking 3.3 percent of the market value of the properties. Taxable values for Class 8 properties were estimated by taking 3 percent of the market value of business property. The tax liability was then calculated by taking 500 mills, as was done for the gross proceeds tax noted above.

I. Fiscal Impact

1. Impact Costs

Costs to the local government were calculated based on the anticipated expenditure associated with in-migrating workers. Impact costs were estimated on a per capita basis using the fiscal year 2003 expenditures for Lincoln County and local governmental units for in-migrating workers and their families. Per student costs were added to the costs for children of in-migrating workers attending school. The 2003 per capita expenditures and 2003 per average number belonging (ANB) costs per student are presented in Table III.18, below.

TABLE III.18 PER CAPITA COSTS

	FY 2003	
Area	Per Capita Expenditure (\$)	Per ANB Expenditure (\$)
Libby	1,410	
K-12 school		6,558
Troy	2,101	
Elementary (incl. middle)		7,598
High School		7,798
Eureka	776	
Elementary (incl. middle)		7,418
High School		6,191
Lincoln County Total	686	6,837

The total basic employment costs for in-migrating workers is presented in Table III.19, on the following page. Total basic employment costs due to in-migrating workers is expected to increase from \$253,797 during year one to \$813,366 during year five.

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⁶ Personal communication, Joe LeForest, 28 September 2005.

TABLE III.19
IN-MIGRANT COSTS – BASIC EMPLOYMENT COSTS

Area	Year 1	Year 2	Year 3	Year 4	Year 5
	In-migran	t Expenditure			
Libby	49,606	101,757	133,004	134,539	132,521
Troy	5,019	10,296	13,458	13,613	13,409
Eureka	773	1,585	2,072	2,096	2,065
Rural Lincoln County	47,121	96,661	126,343	127,801	125,884
Total In-migrant Expenditure	102,519	210,299	274,876	278,049	273,879
	Stud	ent Costs			
Libby K-12	114,038	266,040	385,490	392,594	406,511
Troy Elem	15,529	36,652	53,652	55,619	59,648
Troy HS	10,322	23,645	33,703	33,321	32,391
Eureka Elem	7,393	17,449	25,542	26,478	28,396
Lincoln County HS	3,997	9,155	13,049	12,901	12,541
Total Student Costs	151,278	352,940	511,436	520,913	539,487
Total Basic Employment Costs	253,797	563,239	786,312	798,962	813,366

The total non-basic employment costs for in-migrating workers are presented in Table III.20, below. Total non-basic employment costs due to in-migrating workers is expected to increase from \$128,987 during year one to \$255,531 during year five.

TABLE III.20
IN-MIGRANT COSTS – NON-BASIC EMPLOYMENT COSTS

Area	Year 1	Year 2	Year 3	Year 4	Year 5
	In-migrant E	Expenditure			
Libby	29,921	54,727	63,966	64,495	58,367
Troy	3,027	5,537	6,472	6,526	5,906
Eureka	466	853	997	1,005	909
Rural Lincoln County	28,422	51,986	60,762	61,265	55,444
Total In-migrant Expenditure	61,836	113,102	132,197	133,290	120,626
	Studen	t Costs			
Libby K-12	50,620	93,150	109,765	111,371	101,653
Troy Elem	6,893	12,833	15,277	15,778	14,916
Troy HS	4,582	8,279	9,597	9,453	8,100
Eureka Elem	3,282	6,109	7,273	7,511	7,101
Lincoln County HS	1,774	3,205	3,716	3,660	3,136
Total Student Costs	67,150	123,577	145,627	147,773	134,906
Total Non-Basic Employment Costs	128,987	236,679	277,825	281,063	255,531

Table III.21, presented on the following page, shows total costs for in-migrants, including basic and non-basic employment costs. It starts out at \$382,784 in year one and jumps to more than a million dollars in year five.

TABLE III.21
IN-MIGRANT COSTS – TOTAL EMPLOYMENT COSTS

Area	Year 1	Year 2	Year 3	Year 4	Year 5
	In-migrant I	Expenditure			
Libby	79,527	156,484	196,970	199,034	190,888
Troy	8,046	15,833	19,930	20,139	19,315
Eureka	1,239	2,438	3,069	3,101	2,974
Rural Lincoln County	75,543	148,647	187,105	189,066	181,328
Total In-migrant Expenditure	164,355	323,401	407,073	411,339	394,505
	Studen	t Costs			
Libby K-12	164,658	359,190	495,255	503,965	508,164
Troy Elem	22,422	49,485	68,929	71,397	74,564
Troy HS	14,904	31,924	43,300	42,774	40,491
Eureka Elem	10,675	23,558	32,815	33,989	35,497
Lincoln County HS	5,771	12,360	16,765	16,561	15,677
Total Student Costs	218,428	476,517	657,063	668,686	674,393
Total Employment Costs	382,784	799,918	1,064,137	1,080,025	1,068,897

2. Impact Revenues

Impact revenues were estimated using the various taxes paid by Montanore, property tax revenues for residences of the in-migrating population, and commercial tax revenues as a result of increased commercial activity due to the expected in-migrants.

Property tax revenues were computed for in-migrating workers that would purchase homes in Lincoln County. Property tax revenue calculations assumed an average home price of \$125,662 per in-migrating homeowner. The average home price value is a weighted average of existing single family and mobile home prices in Lincoln County.

Property tax per in-migrating homeowner was calculated by applying the property taxable rate of 3.3 percent, and a mill levy rate of 63 mills. Commercial taxable valuation was calculated at the 2003 commercial/residential ratio of 0.17 percent for each in-migrating worker in Lincoln County.

Table III.22, below, presents basic revenues that would be generated by in-migrating workers. Total basic revenues due to in-migrating workers is expected to increase from \$67,125 in year one to \$154,837 in year five. Non-basic revenues that would be generated by in-migrating workers are also shown. The total non-basic revenues due to in-migrating workers are expected to increase from \$45,417 in year one to \$88,596 in year five.

TABLE III.22
IN-MIGRANT COSTS – BASIC REVENUES

Area	Year 1	Year 2	Year 3	Year 4	Year 5					
Property Tax Revenues										
Libby	11,574	21,640	25,912	26,199	24,702					
Troy	1,113	2,081	2,492	2,519	2,375					
Eureka	390	730	874	884	833					
Rural Lincoln County	32,498	60,761	72,758	73,561	69,359					
Total	45,576	85,212	102,036	103,163	97,269					
	Co	mmercial Tax	xes							
Libby	5,708	11,710	15,306	15,482	15,250					
Troy	300	615	804	813	801					
Eureka	156	319	417	422	415					
Rural Lincoln County	15,385	31,560	41,251	41,727	41,101					
Total	21,549	44,204	57,778	58,445	57,568					
Total Basic Revenues	67,125	129,415	159,814	161,607	154,837					

Table III.23, below, presents non-basic revenues that would be generated by in-migrating workers. Total non-basic revenues due to in-migrating workers is expected to increase from \$45,417 during year one to \$88,596 during year five.

TABLE III.23
IN-MIGRANT COSTS – NON-BASIC REVENUES

Area	Year 1	Year 2	Year 3	Year 4	Year 5
	Property	Tax Revenue	s		
Libby	8,233	15,059	17,601	17,746	16,060
Troy	792	1,448	1,692	1,706	1,544
Eureka	278	508	594	599	542
Rural Lincoln County	23,117	42,282	49,420	49,829	45,094
Total	32,419	59,296	69,307	69,880	63,241
	Commo	ercial Taxes			
Libby	3,443	6,298	7,361	7,422	6,717
Troy	181	331	387	390	353
Eureka	94	172	201	202	183
Rural Lincoln County	9,280	16,973	19,839	20,003	18,102
Total	12,998	23,774	27,787	28,017	25,355
Total Non-Basic Revenues	45,417	83,070	97,095	97,897	88,596

Table III.24, below, shows total revenues, both basic and non-basic, for in-migrating mine workers. It increases from a projected total of \$112,542 in year one to more than double that, \$243, 433 in year five.

TABLE III.24
IN-MIGRANT COSTS – TOTAL REVENUES

Area	Year 1	Year 2	Year 3	Year 4	Year 5					
Property Tax Revenues										
Libby	19,807	36,699	43,513	43,945	40,762					
Troy	1,905	3,529	4,184	4,225	3,919					
Eureka	668	1,238	1,468	1,483	1,375					
Rural Lincoln County	55,615	103,043	122,178	123,390	114,453					
Total	77,995	144,508	171,343	173,043	160,510					
	Comm	ercial Taxes								
Libby	9,151	18,008	22,667	22,904	21,967					
Troy	481	946	1,191	1,203	1,154					
Eureka	250	491	618	624	598					
Rural Lincoln County	24,665	48,533	61,090	61,730	59,203					
Total	34,547	67,978	85,565	86,462	82,923					
Total Non-Basic Revenues	112,542	212,485	256,909	259,504	243,433					

3. Net Fiscal Impact

Total costs to units of local government as a result of the Montanore Project would increase from \$382,784 in year one to approximately \$1.07 million in year five, when the mine and mill operations are at full production. Total property tax revenues would increase from about \$202,500 in year one to nearly \$5.9 million during year five. Net impact would therefore increase from -\$180,242 in year one to over \$4.8 million in year five. While not directly impacted by the Montanore Project, Sanders County receives \$208,000 in gross proceeds tax in year four and \$546,000 in year five. These data are portrayed in Table III.25, on the following page.



TABLE III.25 NET LOCAL GOVERNMENT FISCAL IMPACT DUE TO MONTANORE **DRAFT FOR INTERNAL REVIEW**

DRAFTFORT	IN I EVINAL V				
Subject	Year 1	Year 2	Year 3	Year 4	Year 5
Costs					
Direct Worker Local Government Costs	253,797	563,239	786,312	798,962	813,366
Indirect Worker Local Government Costs	128,987	236,679	277,825	281,063	255,531
Total Costs to Units of Local Government	382,784	799,918	1,064,137	1,080,025	1,068,897
Revenues					
Montanore Taxes:					
Metal Mines License Tax (to Lincoln County ⁷)	0	0	0	215,000	565,000
Gross Proceeds Metal Mines Tax (to Lincoln County ⁸)	0	0	0	832,000	2,184,000
Gross Proceeds Metal Mines Tax (to Sanders County)	0	0	0	208,000	546,000
Montana Property Tax (C4 – land & improvements)	10,000	740,000	1,290,000	2,060,000	2,060,000
Montana Property Tax (C8 – business equipment)	80,000	150,000	210,000	290,000	290,000
Indirect Worker - Commercial Property Tax Revenues	12,998	23,774	27,787	28,017	25,355
Direct Worker - Commercial Property Tax Revenues	21,549	44,204	57,778	58,445	57,568
Indirect Workers - Residential Property Tax Revenues	32,419	59,296	69,307	69,880	63,241
Direct Workers - Residential Property Tax Revenues	45,576	85,212	102,036	103,163	97,269
Total	202,541	1,102,485	1,756,908	3,864,505	5,888,432
Impact	-180,242	302,567	692,771	2,784,479	4,819,535

According to MCA 15-1-501 the Montana Metal Mines License Tax is allocated as follows: 57% to the state general fund, 2.5% to the hard rock mining impact trust account,

^{8.5%} to the hard rock mining reclamation debt service fund,
7.0% to the reclamation and development grants program state special revenue account, and

^{25.0%} to the county or counties identified as experiencing fiscal and economic impacts.

The allocation of the Montana Gross Proceeds Tax, a Class 2 Property Tax, was settled in the early 1990s. As reported by Mr. Joe LeForest, 80% is to be allocated to Lincoln County and the remaining 20% to Sanders County.





IV. Impact Assessment

A. Lincoln County

1. Description of Existing Conditions

a. Local Government Administration

The governing body at the county level is made up of the Lincoln County Board of Commisioners. It consists of three members, each of whom represents a portion of the county. All commissioners are elected by county voters and serve a 6-year term.

The commissioners meet every Thursday at the Lincoln County Courthouse, and occasionally in the Eureka area, according to 2005 minutes from the county Web site. The commissioners oversee county activities and work to ensure that citizens' concerns are met, federal and state requirements are fulfilled, and county operations run smoothly.

Other elected officials in the county include the county attorney, clerk of district court, sheriff, clerk and recorder, school superintendent, treasurer, public administrator, Assessor, coroner and two justices of the peace.

Overall, Lincoln County has 15 different departments to serve the public, including the court clerk, executive <u>assistance</u>, Superintendent of Schools, clerk and recorder, the Montana State University Extension Office, treasurer, county attorney, health department victim/witness program, county nurse, personnel department, weed department, emergency management, planning department and W.I.C. program. The total number of full time employees is 140.

b. Law Enforcement

Law enforcement services in the Lincoln County study area are provided by the Lincoln County Sheriff's Office, Montana Highway Patrol, Eureka Police Department, Troy Police Department, and Libby Police Department. There were a total of 30 full-time law enforcement officers in Lincoln County in 2003. There are 2 jail facilities in the study area – a 24-cell adult jail in Libby and a 4-bed juvenile holding facility in Troy.

Data on crime for Lincoln County were collected from the Montana Board of Crime Control. Table IV.1, on the following page, lists the number of index crimes⁹ reported in Lincoln County from 1994 through 2004. The number of index crimes in Lincoln County decreased from 884 in 1994 to 691 in 2003. Almost 72 percent of the index crimes reported in 2003 were classified as larceny-theft crimes.

The crime rate indicates the number of crimes reported per 100,000 population. The crime rate in Lincoln County for violent crimes decreased from 184.8 per 100,000 people in 1994 to 366.4 per 100,000 people in 2003. The property crime rate declined from 5,260.9 per 100,000 people to 3,302.7 per 100,000 people over the same period.

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⁹ Index crimes or Part I crimes include the seven most serious crimes committed against persons and property.

TABLE IV.1
NUMBER OF INDEX CRIMES REPORTED IN LINCOLN COUNTY

					1994-2003					
Year		Viole	ent Crimes		Pro	Property Crimes			100	Rate (per 0,000 ılation)
Teal	Homicide	Rape	Robbery	Aggravated Assault	Burglary	Larceny- Theft	Motor Vehicle Theft	Total	Violent	Property
1994		4		26	130	673	51	884	184.8	5,260.9
1995	2		2	2	120	600	61	787	36.3	4,731.0
1996	1			17	47	149	15	229	100.6	1,178.7
1997	1	1		41	133	561	41	778	227.5	3,888.9
1998			_	19	10	51	1	81	887.0	2,894.5
1999		1		2	9	29		41	293.0	3,710.9
2000		10	1	26	46	336	24	443	192.4	2,111.0
2001		6	2	41	59	445	38	591	259.5	2,870.2
2002	6	9	3	48	96	483	34	679	347.6	3,228.2
2003	4	1	1	63	95	497	30	691	366.4	3,302.7

c. Fire Protection

Fire protection in Lincoln County is provided by the following fire departments: the City of Libby Fire Department, Lincoln County Rural Fire Department, Bull Lake Volunteer Fire Department, Eureka Volunteer Fire Department, Trego-Fortine-Stryker Fire Service, Troy Volunteer Fire Department, Fisher River Valley Fire Service, McCormick Rural Fire Department, and Yaak Fire Service. The Libby rural/city Fire Department has 2 fire marshals and 28 volunteers, and the Troy rural/city Fire Department has 25 volunteers.

d. Ambulance Services

Ambulance services are provided to the Troy/Libby/Eureka area via four companies listed in the 2004-2005 Libby phonebook. These are the Eureka Ambulance Service, Volunteer Ambulance Service and Troy Ambulance Service. In addition, the local hospital, St. John's Lutheran Hospital in Libby, also provides an ambulance service to the local area.

There are also four emergency air ambulance services for critical care needs listed in the 2004-05 Libby phonebook. These companies are AA Advance Air Ambulance, AAA-EMS Accredited Air Ambulance, AAAN Air Ambulance Anywhere Network and Air Care.

e. Hospital and Long-Term Care Facilities

The Lincoln County health care facilities include the St. John's Lutheran Hospital - a critical access hospital in Libby. There are two federally qualified health care centers in Lincoln County: Prompt Care, a rural health clinic in Eureka, and Lincoln Community Health Services in Libby.

St. John's Lutheran Hospital in Libby is a not-for-profit 25-bed medical facility. The hospital has state-of-the-art equipment and offers 24-hour emergency care services. The other health care facilities in the area include the Libby Care Center for the elderly, Libby Clinic, Prompt Care, Women's Health Focus, Neuman Foot & Ankle Clinic and Lincoln County Radiology.



The Troy area medical facilities include the Medicine Tree Primary Care and the Troy Medical Arts Complex. Lincoln County is served by 15 licensed physicians, six nursing practitioners, three physician's assistants, eight dentists, and seven dental hygienists.

In 2005, the Community Health Center in Libby had been open for three years, and extreme growth for the agency is forecasted into the future. The program, funded by a federal grant, targets low-income clients. Billing for patients is conducted on a sliding scale. Some 80 percent of the federal grant which funds the center goes to subsidize this sliding scale system. Of the clinic's clientele, some 70 percent qualify for an incomebased discount on services; 43 to 45 percent of these patients are uninsured. Though the sliding scale is in place, some payment is required, and the minimum fee for services is \$5. It has been estimated that every ten insured patients seen by the clinic would pay for an additional three uninsured patients to be served. Over the January through March 2005 period, the clinic averaged 1,000 visits per month in the medical and dental clinics combined ¹⁰

f. Local Physicians

Thirteen physicians serve the Troy/Libby area with a variety of medical specialties, including family practice, internal medicine, obstetrics, podiatry, and urology. In addition, there are four chiropractic physicians and two optometrists in Libby. In Troy there is one physician specializing in family practice.

Four dentists serve residents in the Libby area and one dentist serves residents in the Troy area, according to the Libby 2004-2005 phonebook.

g. Water Supply

More than 50 percent of the households in Lincoln County use wells for their water supply. Approximately 4,750 households in Libby, 1,000 households in Troy and 1,100 households in Eureka are served by the municipal water system. The city of Libby obtains its water from Flower Creek. The city of Troy receives its municipal water supply from two wells and O'Brien Creek. Water service in Troy is obtained for a fee of \$14 for residential and \$19.39 for commercial service.

h. Wastewater Treatment

The city of Libby has operated a public wastewater treatment facility since 1964, and converted from a primary to a secondary treatment facility (i.e., an activated sludge oxidation ditch system) in 1985. In the city of Troy, sewer service is obtained for a fee of \$34.27 for residential and \$38.97 for commercial service.

i. Solid Waste

According to the Department of Environmental Quality,¹¹ Lincoln County was required in 1993 to close the landfill it had been using for the previous thirty years. In an effort to comply with EPA regulations regarding landfills, the county pioneered a program using computers and a bar code system to manage their municipal solid waste programs. The

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Winstrom, Jeanie. Email correspondence 06 April 2005.

 $^{^{11}} Source: Department of Environmental Quality, Montana \ [http://www.deq.state.mt.us/recycle/PAYT/paytNewsletter.pdf].$

community decided to build an inert waste landfill and container site that would be operated by an outside contractor. A computerized system was developed to assess users of the site for the amount of waste they actually disposed of. The contractor would haul household waste from the container site to a licensed municipal solid waste landfill 70 miles away near Great Falls. The operation is now going on five years of operation.

j. Utilities

Residential telephone service in the Lincoln County study area is provided by Frontier, a subsidiary of Citizens Communications. The long distance service is provided by AT&T. Electric service for Libby is provided by Flathead Electric Co-op Inc. Lincoln Electric Co-op Inc. is an electric distribution cooperative headquartered in Eureka, providing electricity service to Northeast Lincoln. Northern Energy provides propane to the local area. Northern Lights Inc. is the electricity provider in the Troy area. Heating sources in the study area include fuel, oil, propane, wood, and electricity.

k. Social Welfare

The Human Services Office is located in Libby. Funding for the social welfare program comes from state, federal, and county sources; however, the state administers the program. Services include temporary assistance for needy families, food stamps, medical services, general assistance, and fuel assistance.

As per the 2000 Census, there were 770 families, or 14.2 percent of the county's families, below the poverty level in Lincoln County. This compares to a statewide poverty rate of 10.5 percent of all families.

Data on selected social welfare characteristics were collected from the Department of Health and Human Services (DPHHS), Montana. During fiscal year 2004, per capita cases per month for families receiving temporary assistance in Lincoln County was almost equal to the statewide average. The average monthly payment for needy families in Lincoln County was some \$336 compared to \$344 statewide.

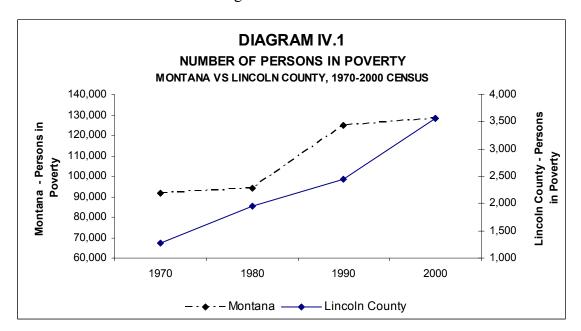
Lincoln County had a higher rate of food stamp recipients, at 1.51 per capita cases per month compared to one per capita case statewide. The average value of food stamps per recipient in Lincoln County, at \$87.1, was slightly higher than the statewide average of \$84.9.

Medical assistance in Lincoln County, at 1.33 per capita cases per month, was higher than the 0.94 per capita cases statewide. However, the average monthly payment per case in Lincoln County, at \$471, was lower than the statewide per capita payment of some \$551. Table IV.2, on the following page, presents details of selected social welfare characteristics.

TABLE IV.2
SELECTED SOCIAL WELFARE CHARACTERISTICS
FISCAL YEAR 2004

I ISOAL IL	AIN 2007									
Category	Per Capita Cases* per Month	Average Monthly Payment – per case								
MONTANA										
Temporary Assistance for Needy Families	0.07	\$344.0								
Food Stamps	1.00	\$84.9								
Medical Assistance (MEDICAID)	0.94	\$551.1								
Families below Poverty level (2000 Census)		10.5								
LINCOLN	COUNTY									
Temporary Assistance for Needy Families	0.06	\$336.3								
Food Stamps	1.51	\$87.1								
Medical Assistance (MEDICAID)	1.33	\$471.0								
Families below Poverty level (2000 Census) * Per capita cases based on July 2002 population estimate	s.	14.2								

The total number of individuals in poverty in Lincoln County increased by 45.2 percent between 1990 and 2000. This compares to a statewide increase of 2.8 percent. The county's poverty rate of 19.16 percent compares to a rate of 14.61 percent for the state in 2000. Diagram IV.1, below, presents the number of persons in poverty, as per the decennial censuses from 1970 through 2000.



The number of individuals in poverty in the age group 6 to 17 years increased by over 58 percent over the last decade. Almost 56 percent of those in poverty in 2000 were in the age group of 18 to 64 years. Data on individuals in poverty by age are given in Table IV.3, on the following page.

TABLE IV.3 INDIVIDUALS IN POVERTY BY AGE MONTANA VS LINCOLN COUNTY, 1990 & 2000 CENSUS; SF3 DATA

	M	ANATIO		LINCOLN COUNTY		
SUBJECT	1990	2000	% Change	1990	2000	% Chang e
Under 5 years	13,980	12,174	-12.92	255	279	9.41
5 years	2,915	2,184	-25.08	44	32	-27.27
6 to 11 years	15,634	14,875	-4.85	337	485	43.92
12 to 17 years	12,177	13,679	12.33	259	459	77.22
18 to 64 years	67,714	75,074	10.87	1,288	2,008	55.90
65 to 74 years	5,916	4,473	-24.39	149	177	18.79
75 years and over	6,517	5,896	-9.53	118	118	0.00
Total	124,853	128,355	2.80	2,450	3,558	45.22
Total for whom poverty status was determined	776,793	878,789		17,315	18,568	
Poverty Rate	16.07	14.61		14.15	19.16	

l. Public Libraries

Lincoln County contains three public libraries. These are the Eureka Public Library, the Lincoln County Public Library in Libby, and the Troy Public Library.

m. Commercial Services

Libby is the largest incorporated municipality in Lincoln County. It is the major trade center in the county. The next closest urban center, Kalispell, is 89 miles east of Libby. Other larger cities within a few hours of Libby include Spokane, Washington, 132 miles away and Missoula, Montana, 190 miles away.

The major industries in Lincoln are lumber and wood products. Professional services, including attorneys, accountants, consulting engineers, builders, and contractors, are available in Libby. Three banks and two private credit unions serve the area residents.

As per the Montana Department of Labor and Industry, the top 10 private employers for Lincoln County during the third quarter of 2004, listed in alphabetical order, were Genesis Inc., Harlow's School Bus Service, Libby Care Center, McDonalds (Libby), Mountain View Manor, Owens & Hurst Lumber, Plum Creek Timber, Rosauer's Supermarkets, St John's Lutheran Hospital, and Stein's IGA.

n. County Planning

The Lincoln County Department of Environmental Planning prepared the Land Use Plan in 1982. The plan describes proposed land use patterns for the county as a whole and separately for each of five valleys where development may occur. Environmental planning in the Libby area is currently focused on two issues – the Air Pollution Control Compliance Plan and the Superfund Libby Groundwater Site Remedial Plan.

o. Private and Non-profit Agencies

As per the Libby Chamber of Commerce, there are at least 16 service organizations in the Libby area, including Kootenai Heritage Council, Kootenai River Development Council, Elks Lodge, Lions Club, Libby Rotary Club, American Legion, and VFW.

B. City of Libby

1. Description of Existing Conditions

a. Local Government Administration

The city of Libby is governed by a six member elected council and a mayor. The City Council meets on the first Monday of every month at City Hall to discuss business. Councilors also hold a weekly breakfast meeting at Henry's Restaurant, with the purpose being for the public to keep the council in touch and updated in a less formal manner than a traditional meeting setting. No substantial discussion or decisions are made at the breakfast meetings.

There are seven departments in the city of Libby. These include a city clerk, building inspector, police, street maintenance, volunteer fire department, sewage treatment plant and water treatment plant. The city has 28 full time employees.

b. Law Enforcement

The city of Libby's first police department was organized in 1914 and operated until 1981. At that time the city of Libby elected to contract law enforcement services with Lincoln County. In 1996, the City Council decided, due to the escalating cost of the contract and the service being provided, to restore the Libby Police Department. On June 20, 1996, Clay Coker, a deputy with Lincoln County, was hired by the city of Libby as chief of police and was given the task of forming a police department. Brent Teske was hired a few days later as the first officer. On the morning of July l, 1996, they began their careers with the Libby Police Department.

In July 1996, three additional officers were hired and on Aug. 1, 1996, the Libby Police Department was in full operation with five officers. Currently, there are four officer positions. One is vacant and in the process of being filled. Each of the officers and the police chief has a patrol car.

Law enforcement services in Libby also include a 24-bed adult jail facility to house offenders.

c. Fire Protection

The City of Libby Fire Dept. and Lincoln Co. Rural Fire District #1 provide fire protection, public education, fire prevention and code management to the citizens of Libby and approximately 12 square miles in the surrounding rural area.

The department operates from one station located on Sixth Street between Mineral Avenue and Montana Avenue. The department operates with three Class A engines, three water tenders, one 4x4 wild land engine, utility van, hose/boom truck combination and a 1,500 GPM trash pump. This emergency service is staffed with 30 volunteers and two fire marshals.



Department training is held on Thursday nights at 7:30 p.m. The first Thursday of the month includes a business meeting at 8 p.m. Additional training is provided by Montana Fire Service Training School, National Fire Academy, and the U.S. Forest Service/Dept. of State Lands; other emergency services are available.

d. Ambulance Service

Ambulance services are via the Libby Ambulance Service, listed in the 2004-05 phonebook. In addition, the local hospital, St. John's Lutheran Hospital, also provides an ambulance service to the area.

There are also four emergency air ambulance services for critical care needs listed in the Libby phonebook. These companies are AA Advance Air Ambulance, AAA-EMS Accredited Air Ambulance, AAAN Air Ambulance Anywhere Network and Air Care.

e. Water Supply

Approximately 4,750 households in Libby are served by the municipal water system, the Libby Water Treatment Plant, which takes water from Flower Creek.

f. Wastewater Treatment

The city of Libby has operated a public wastewater treatment facility since 1964, and converted from a primary to a secondary treatment facility (i.e., an activated sludge oxidation ditch system) in 1985, due to federal health laws concerning wastewater treatment. It is designed to process up to 1.1 million gallons per day of waste.

g. Solid Waste

Solid waste collection in Libby is provided by an outside contractor. According to the Department of Environmental Quality, Lincoln County was required in 1993 to close the landfill it had been using for the previous thirty years. In an effort to comply with EPA regulations regarding landfills, the county pioneered a program using computers and a bar code system to manage their municipal solid waste programs. The community decided to build an inert waste landfill and container site that would be operated by an outside contractor. A computerized system was developed to assess users of the site for the amount of waste they actually disposed of. The contractor would haul household waste from the container site to a licensed municipal solid waste landfill 70 miles away near Great Falls. The operation is now going on 5 years of operation.

According to the 2004-05 Libby phonebook, garbage collection is also provided by Kootenai Disposal, Lincoln County Sanitation or North Lincoln County Sanitation.

¹² Source: Department of Environmental Quality, Montana [http://www.deq.state.mt.us/recycle/PAYT/paytNewsletter.pdf].



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C. City of Troy

1. Description of Existing Conditions

a. Local Government Administration

A mayor and four member council is the governing body for the city of Troy. The mayor and council meet on the second and fourth Thursday of the month at Troy City Hall.

There are six departments in the city, which include the city clerk, city attorney and judge, courts, permits and fees, public works and cemetery. The total number of full time employees is 12.

b.Law Enforcement

Law enforcement services are provided by the Troy Police Department. Currently, there are two officers, a police chief and three patrol vehicles.

Troy law enforcement services also include a jail to hold up to four juvenile offenders. The jail facility was upgraded in 1990 with a grant.

c. Fire Protection

The Troy rural/city Fire Department has 25 volunteers and firefighting vehicles which include pumpers, water tenders quick response units and an equipment van. All vehicles are housed in the city Fire Hall in Troy.

d. Ambulance Service

Ambulance services are provided to the Troy area via the Troy Ambulance Service, listed in the 2004-2005 Libby phonebook. There are also four emergency air ambulance services for critical care needs listed in the 2004-05 Libby phonebook. These companies are AA Advance Air Ambulance, AAA-EMS Accredited Air Ambulance, AAAN Air Ambulance Anywhere Network and Air Care.

e. Water Supply

Approximately 1,000 households in Troy are served by the municipal water system. The city of Troy receives its municipal water supply from two wells and O'Brien Creek. Water service in Troy is obtained for a fee of \$14 for residential and \$19.39 for commercial service.

f. Wastewater Treatment

In the city of Troy, sewer service is obtained for a fee of \$34.27 for residential and \$39.19 for commercial service. Although residents relied on septic tanks for years, a new wastewater treatment facility was constructed in 2000 and it serves the entire city of Troy.

g. Solid Waste

The county has a solid waste collection program that is operated by using computers and a bar code system. It includes an inert waste landfill and container site that is operated by



an outside contractor. The contractor hauls household waste from the container site to a licensed municipal solid waste landfill 70 miles away near Great Falls. According to the 2004-05 Libby phonebook, garbage collection is also provided by Kootenai Disposal, Lincoln County Sanitation or North Lincoln County Sanitation.

D. City of Eureka

1. Description of Existing Conditions

a. Local Government Administration

The city government is made up of a mayor and four councilors. The council meets on the second Monday of every month to discuss city business. The city population is just over 1,000 and there are only nine employees at the local government level. The departments include a clerk's office, assistant clerk, judge and public works.

b. Law Enforcement

The city of Eureka has its own police department, with three sworn officers. Each has a patrol car. Parts of rural Eureka are also patrolled by the Lincoln County Sheriff's Office.

c. Fire Protection

Fire Protection in Eureka is provided by the Eureka Volunteer Fire Department.

d. Ambulance Service

Ambulance services are provided to the Eureka area via the Eureka Ambulance Service, listed in the 2004-2005 Libby phonebook. There are also four emergency air ambulance services for critical care needs listed in the 2004-05 Libby phonebook. These companies are AA Advance Air Ambulance, AAA-EMS Accredited Air Ambulance, AAAN Air Ambulance Anywhere Network and Air Care.

e. Water Supply

Approximately 500 households in Eureka are served by the municipal water system. The city receives its municipal water supply from two sources, the Tobacco River and a deep basalt well. The city also operates a water and sewer district for approximately 100 homes just outside the city limits.

f. Wastewater Treatment

In the city of Eureka, sewer service is provided by a wastewater treatment facility. The charge is \$28.67 for residential and commercial use.

g. Solid Waste

The county has a solid waste collection program that is operated by using computers and a bar code system. It includes an inert waste landfill and container site that is operated by an outside contractor. The contractor hauls household waste from the container site to a licensed municipal solid waste landfill 70 miles away near Great Falls. According to the 2004-05 Libby phonebook, garbage collection is also provided by Kootenai Disposal, Lincoln County Sanitation or North Lincoln County Sanitation.

E. Libby School District

1. Description of Existing Conditions

Enrollment for Libby K-12 Schools declined by 18.3 percent, from 1,846 in 2001 to 1,509 in 2004. Elementary school enrollment experienced the largest decrease, a total of 227 students, middle school enrollment decreased by 37 students, and high school enrollment decreased by 73 students. School enrollment data was received from the Office of Public Instruction (OPI), Montana.

Currently, there are 107 teachers, 30 instructional aides, five guidance counselors, four librarians, one district level administrator and six school level administrators. The average teacher-student ratio in the district is 16 to 1. According to the Web site greatschools.net, Libby students are on track for meeting federal No Child Left Behind Act requirements for academic growth, student assessment, teacher qualifications and annual local report cards.

F. Troy Elementary School District

1. Description of Existing Conditions

Actual school enrollment for Troy Public Schools declined overall by 13.3 percent, from 572 in 2001 to 496 in 2004.

Troy Elementary School District includes 316 students in grades K-8. Elementary school enrollment (grades K-6) decreased by a total of 19 students, middle school enrollment (grades 7-8) decreased by 21 students, and high school enrollment decreased by 36 students from 2001 to 2004.

Currently, there are 23 teachers, seven instructional aides, one guidance counselor, no librarians, one district level administrator and one school level administrator. The average student-teacher ratio in the district is 14 to 1.

Troy Elementary students are on track for meeting federal No Child Left Behind Act requirements for academic growth, student assessment, teacher qualifications and annual local report cards.

G. Troy High School District

1. Description of Existing Conditions

Actual school enrollment for Troy Public Schools declined overall by 13.3 percent, from 572 in 2001 to 496 in 2004. High school enrollment decreased by 36 students. School enrollment data was received from the Office of Public Instruction (OPI), Montana.



Currently, there are 18 teachers, two instructional aides, one guidance counselor, one librarian, one district-level administrator and one school level administrator. The average student-teacher ratio in the district is 12 to 1.

Troy High School students are on track for meeting federal No Child Left Behind Act requirements for academic growth, student assessment, teacher qualifications and annual local report cards.

H. Eureka Elementary School District

1. Description of Existing Conditions

Enrollment for Eureka Public Schools increased by 6 percent, from 813 in 2001 to 862 in 2004.

Eureka Elementary School District includes 476 students in grades K-8. Elementary school enrollment (grades K-6) increased by a total of 17 students and middle school enrollment (grades 7-8) decreased by 30 students.

Currently, there are 33 teachers, no instructional aides, two guidance counselors, one librarian, one district-level administrator and two school level administrators. The average student-teacher ratio in the district is 14 to 1.

Eureka Elementary students are on track for meeting federal No Child Left Behind Act requirements for academic growth, student assessment, teacher qualifications and annual local report cards.

I. Lincoln County High School District

1. Description of Existing Conditions

Enrollment for Eureka Public Schools increased by 6 percent, from 813 in 2001 to 862 in 2004. Lincoln County High School enrollment increased by 62 students.

Currently, there are 24 teachers, no instructional aides, two guidance counselors, one librarian, one district-level administrator and one school level administrators. The average student-teacher ratio in the district is 15 to 1.

Lincoln County High School students are on track for meeting federal No Child Left Behind Act requirements for academic growth, student assessment, teacher qualifications and annual local report cards.